MICROANALYSIS IN MEDICAL BIOCHEMISTRY—Third Edition—E. J. King, M.A., Ph.D., D.Sc., F.R.I.C., Professor of Chemical Pathology, University of London Postgraduate Medical School, and I. D. P. Wootton, Ph.D., M.A., M.B., B.Chir., F.R.I.C., Lecturer in Chemical Pathology at the Postgraduate Medical School, London. Grune & Stratton, New York, 1956. 292 pages, \$4.00.

This book is a working manual of clinical laboratory procedures for use by routine and teaching laboratories at the Postgraduate Medical School of the University of London. The term "micro" in the title refers to the fact that most of the methods for blood are devised for use with 0.1-0.2 ml. of sample. There are separate chapters dealing with analyses for various chemical constituents of whole blood, plasma, or serum. The technique of filter paper electrophoresis for plasma protein is next described, followed by methods for determination of protein and chlorides in spinal fluid. A number of analytical procedures for use with urine or feces are then treated. The identification of reducing substances in urine by paper chromatography is a useful addition to this chapter. Under the chapter heading "Tests of Function," some metabolic tests such as glucose and galactose tolerance and pyruvate metabolism as well as tests of renal function (urea, inuline, creatinine, and para-aminohippurate clearance) are described. The applications of radioisotopes to clinical diagnosis are illustrated by measurements of extra cellular fluid volume using radio bromide, plasma and blood volume with I131-labeled albumin, and excretion or plasma uptake of radioiodine as thyroid function tests. The use of the direct vision spectroscope is taught by examination for certain pigments in blood, urine, or feces and quantitation of carbon monoxide in blood. Gastric and duodenal analyses, and analyses of calculi are discussed in other sections.

This text has enjoyed two prior editions, including translations into several foreign languages. In the present edition, the material has been revised and brought up to date notably by eliminating all reference to the Duboscq and other simple colorimeters and expanding the treatment of absorption spectrophotometry both in its theoretical and practical aspects. A separate chapter has also been devoted to flame photometry.

The arrangement of the book is that usually associated with a laboratory manual for teaching clinical laboratory methods, As such it should serve not only as a text but also as a practical and concise reference for the performance of the numerous clinical laboratory procedures which it describes.

HAROLD A. HARPER, Ph.D.

PRINCIPLES OF CLINICAL ELECTROCARDIOG-RAPHY—Mervin J. Goldman, M.D., Assistant Chief of the Medical Service and Cardiologist, Oakland Veterans Administration Hospital; Assistant Clinical Professor of Medicine, University of California School of Medicine. Lange Medical Publications, Los Altos, 1956. 310 pages, \$4.50.

This compendium of electrocardiography is a genuine bargain in regard to completeness, clarity and price. It is paper-bound (is this the welcome revolt against expensive hard-covered books that are dated as soon as published?), but sturdy. It is written for the generalist and the internist whose hobby is other than cardiology. Nevertheless, it is sophisticated, constantly devolves on basic electrophysiologic theory and is astonishingly complete; hence, it is a book from which medical students can get their electrocardiographic bearings. Its value lies in its succinctness. It should find a ready place in the office for the practitioner to use. Its complete index will help him interpret a problem tracing.

The first 71 pages deal with definition of normal electrocardiographic configurations and their production. The diagrams are exceptionally well drawn. However, in picturing the complexes in natural size, the details are often blurred (as in the depiction of the R' (r') wave on page 23). The discussion of the cardiac vector in only 4 pages of text and diagrams is admirably concise.

The figures depicting the electrical positions of the heart are especially clear. The quintet of electrocardiographic pathology: Ventricular hypertrophy, myocardial infarction, bundle branch block and arrhythmias are succinctly presented and each subdivision adequately diagrammed in 160 pages. Master's two-step test is well-discussed: Positive signs, contraindications and pitfalls. Pseudo-ST-depression is delineated well.

Although pericarditis is neatly described and well-illustrated by example tracings, the sample typical ST-elevation with concavity upward on page 251 is hardly different from the convexity-upward of infarction just below it.

The effect of drugs and electrolyte imbalance is well done. The text closes with fifty-odd tracings for practice interpretation. The pages carrying the discussion pertinent to the interpretation is given.

Wisely, pseudo-definitive patterns for congenital defects are not listed.

THE VISUAL FIELDS—A Textbook and Atlas of Clinical Perimetry—David O. Harrington, A.B., M.D., F.A.C.S., Clinical Professor of Ophthalmology, University of California School of Medicine. The C. V. Mosby Company, St. Louis, 1956. 327 pages, 234 illustrations, and nine color plates, \$16.00.

This textbook has a scientific basis with a clinical approach.

The book begins by explaining perimetry of the most elemental type to that which requires highly specialized techniques and equipment. The use of the tangent screen is advocated as the most practical clinical procedure in the average type of case.

The multiple pattern type of method, which is becoming deservedly popular, is explained. This method provides a rapid efficient screening procedure which can be operated by any office technician.

The chapter on anatomy is an excellent review of the visual pathway well worth any clinician's time.

The illustrations are taken from the author's extensive files and correlates the field study with the clinical findings and the pathology.

This book is a must in the reference library of each ophthalmologist.

ALFRED R. ROBBINS, M.D.

CLINICAL LABORATORY METHODS—Fifth Edition—W. E. Bray, M.D., Consulting Laboratory Director, Martha Jefferson Hospital. The C. V. Mosby Company, St. Louis, 1957. 731 pages, 124 text illustrations and 18 color plates, \$9.75.

This fifth edition of this excellent clinical laboratory methods textbook compares very favorably with the fourth edition which was published by the C. V. Mosby Company in 1951. It is approximately the same size as the fourth edition having 124 text illustrations compared to 119 text illustrations in the 1951 edition. It has 18 color plates which is identical to that in the 1951 edition. It has 731 pages compared to 579 in the previous edition. This fifth edition, as the fourth, covers the entire field of clinical laboratory methods and includes such new subjects as electrophoresis and paper chromatography, as well as the study of abnormal hemoglobins. It has excellent coverage of hematology, clinical chemistry, bacteriology, and other fields of clinical laboratory medicine. This book is highly recommended.

PAUL MICHAEL, M.D.